

WHAT IS CLAIMED:

1 1. A MRI RF coil array, said array comprising:

2 a first coil having a null B_1 point and a quasi-one-peak

3 sensitivity profile; and

4 a second coil oriented with respect to said first coil to

5 reduce coupling.

1 2. A MRI RF coil array according to claim 1, wherein said

2 second coil is within said first coil.

1 3. A MRI coil array according to claim 1, wherein said

2 second coil overlaps said first coil.

1 4. A MRI coil array according to claim 1, wherein said

2 second coil is cascaded with said first coil.

1 5. A MRI coil array according to claim 1, wherein said

2 second coil is solenoidal.

1 6. A MRI coil array, said array comprising:

2 a first solenoidal coil having a first section and a second

3 section, said first section having more turns than said

4 second section and said second section having a

5 counter-rotational orientation with respect to said

6 first section; and

7 a second solenoidal coil, said second coil being oriented

8 with respect to said first coil to reduce coupling.

1 7. A MRI coil array according to claim 6, wherein said

2 second coil is oriented between said first and second sections.

1 8. A MRI coil array according to claim 6, wherein said
2 second coil is oriented about said second section.

1 9. A MRI coil array according to claim 6, wherein said
2 second coil is cascaded with said first coil.

100347 0220 2453001